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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/765,965	01/19/2001	Debra Hensgen	OPTV-062/ORG/US	8232

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EXAMINER

DEMICO, MATTHEW R

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 05/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/765,965

Applicant(s)

HENSGEN ET AL.

Examiner

Matthew R. Demicco

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/24/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This action is responsive to an amendment filed 11/16/2004. Claims 1-54 are pending. Claims 1, 15, 20, 31 and 45 are amended. The objection to the Specification is hereby withdrawn in light of the amendment. Applicant's failure to adequately traverse the Examiner's taking of Official Notice in the last Office Action is taken as an admission of the fact(s) noticed.

Response to Arguments

2. Applicant's arguments with respect to claims 1, 15, 20, 31 and 45 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-54 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant has amended the independent claims to recite the limitation of identifying a particular point in time in the first perspective and *automatically* presenting the second perspective to the viewer at the particular point in time. While Applicant's disclosure teaches

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broadcasting meta-data including a time and an offset along with the video, nowhere in Applicant's specification is there a teaching of the claimed automatic switching. Applicant merely discloses that the user is able to issue commands to switch between perspectives if they desire to see a replay or wish to jump to a specific event. Subsequently, the claimed automatically presenting the second perspective at the particular point in time is considered to be new matter.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,600,368 to Matthews, III in view of International PCT WO 92/22983 to Browne et al. and further in view of U.S. Patent No. 6,704,790 to Gopalakrishnan.

Regarding Claim 1, Matthews discloses a method for processing broadcasts, comprising receiving a broadcast of a program (Col. 3, Lines 58-60), the broadcast containing a plurality of perspectives of the program (Col. 3, Lines 16-25). Matthews further discloses presenting a first perspective of the plurality of perspectives to a viewer (Col. 4, Lines 5-13). Matthews also discloses that each viewpoint of the program is carried on a separate channel (Col. 3, Lines 21-29). What is not disclosed, however, is storing at least one of the pluralities of perspectives.

Browne discloses an audio/video recorder that is operable to simultaneously record and display a plurality of video and audio signals (Page 6, Lines 1-12). Browne is evidence that ordinary workers in the art would recognize the benefits of being able to record multiple channels of video and audio simultaneously. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the multiple perspective channels of Matthews with the multiple channel recording of Browne in order to enable a user to record all the channels that comprise the broadcast programming they wish to view such that the program is complete when they choose to reproduce it. What Matthews in view of Browne do not disclosed, however, is identifying in the first perspective a particular point in time in the program and automatically presenting a second perspective of the program to the viewer at the particular point in time.

Gopalakrishnan discloses a multimedia system for transmitting television programming to a client for subsequent playback including two or more streams of data (Col. 5, Lines 17-31). The server further is operable to send a switching packet to the client to indicate a switch from the first data stream to a second data stream (Col. 5, Line 63 – Col. 6, Line 14). At a particular time in the first program, such as at the end of the clip, an end-of-stream packet is sent to the client (See Figure 2, 214 and Col. 5, Lines 33-39). This reads on the claimed identifying in the first perspective a particular point in time in the program. A switch packet (222) immediately follows the EOS packet and instructs the client device to switch to a second multimedia stream. This reads on the claimed automatically presenting the second perspective of the program to the viewer

beginning at the particular point in time. Gopalakrishnan is evidence that one of ordinary skill in the art would appreciate the ability to indicate a point in which a client should switch between a plurality of data streams. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Matthews in view of Browne with the automatic stream switching of Gopalakrishnan in order to string together a plurality of video segments without requiring the user to select each one manually.

Regarding Claim 2, Matthews in view of Browne and further in view of Gopalakrishnan disclose a method as stated above in Claim 1. Browne discloses simultaneously recording and displaying video and audio signals (Page 6, Lines 1-12). This reads on the claimed presenting the first perspective and storing being performed simultaneously.

Regarding Claim 3, Matthews in view of Browne and further in view of Gopalakrishnan disclose a method as stated above in Claim 1. Browne further discloses automatic program recording (Pages 22-24 and Figures 6 and 13). This reads on the claimed storing the at least one of the plurality of perspectives being performed automatically.

Regarding Claim 4, Matthews in view of Browne and further in view of Gopalakrishnan disclose a method as stated above in Claim 1. Browne further discloses that a user may select a program and press the play button to start a program (Page 33, Lines 10-13). This reads on the claimed presenting at least one of the stored perspectives.

Regarding Claim 5, Matthews in view of Browne and further in view of Gopalakrishnan disclose a method as stated above in Claim 4. Browne further discloses simultaneously recording and displaying a program as stated above. This reads on the claimed presenting at least one of the perspectives and storing being performed simultaneously.

Regarding Claim 6, Matthews in view of Browne and further in view of Gopalakrishnan disclose a method as stated above in Claim 5. Browne further discloses the ability to receive as many as 8 inputs simultaneously for playback and recording (See Figure 1, 101a – 101h). In combination with Matthews, the system of Browne is therefore operable to store all the perspectives.

Regarding Claim 7, Matthews in view of Browne and further in view of Gopalakrishnan disclose a method as stated above in Claim 1. Matthews discloses receiving a plurality of related video streams, each stream including one of the perspectives as stated above.

Regarding Claim 8, Matthews in view of Browne and further in view of Gopalakrishnan disclose a method as stated above in Claim 1. What is not disclosed, however, is receiving a plurality of related audio streams, each stream including one of the perspectives. Official Notice is hereby taken that it is well known in the art to transmit multiple audio streams for television programming. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of Matthews in view of Browne and further in view of Gopalakrishnan with the multiple audio streams of the well-known prior art in order to

allow a user to hear different languages or commentary associated with a particular program stream. Browne further discloses simultaneously recording and displaying a plurality of video and audio signals as stated above.

Regarding Claim 9, Matthews in view of Browne and further in view of Gopalakrishnan disclose a method as stated above in Claim 1. Browne further discloses outputting multiple programs simultaneously in tiled or overlapping windows (Page 16, Line 28 – Page 17, Line 2 and Page 21, Lines 18-25). This reads on the claimed presenting the first perspective in one window of a display and presenting a second perspective from the plurality of stored perspectives in a different window of the display.

Regarding Claim 10, Matthews in view of Browne and further in view of Gopalakrishnan disclose a method as stated above in Claim 1. Browne further discloses storing at least one of the pluralities of perspectives in a circular buffer (Page 7, Lines 20-31).

Regarding Claim 11, Matthews in view of Browne and further in view of Gopalakrishnan disclose a method as stated above in Claim 1. Browne further discloses outputting the display data to a television (Page 6, Line 26). It is inherent that a video signal be prepared for display on the television when presenting in order for the signal to be properly received and displayed by the television.

Regarding Claim 12, Matthews in view of Browne and further in view of Gopalakrishnan disclose a method as stated above in Claim 1. Browne further discloses displaying video and audio signals as stated above. It is inherent that in order to reproduce an audio signal, the audio signal must be prepared for a speaker.

Regarding Claim 13, Matthews in view of Browne and further in view of Gopalakrishnan disclose a method as stated above in Claim 4. Browne discloses sending one of the stored perspectives from a storage device to a display as stated above. What is not disclosed, however, is sending one of the stored perspectives from a storage device through a demultiplexer to a display. Official Notice is hereby taken that it is well known to use a demultiplexer when transmitting stored audio/video from a storage device to an output device. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of Matthews in view of Browne and further in view of Gopalakrishnan with the demultiplexer of the well-known prior art in order to implement the storage video/audio information in a digital data-stream such as the well-known MPEG compression format.

Regarding Claim 14, Matthews in view of Browne and further in view of Gopalakrishnan disclose a method as stated above in Claim 4. Browne further discloses that presenting at least one of the pluralities of perspectives includes searching one of the stored perspectives (Page 30, Lines 10-19 and Figure 11).

Regarding Claim 15, Matthews in view of Browne and further in view of Gopalakrishnan disclose a method for playing a multi-perspective program comprising receiving a broadcast of the program including a plurality of perspectives of the program, recording at least one of the perspectives in a storage device and sending a first perspective of the plurality of perspectives to a display as stated above in Claim 1. Further it is inherent that in playing the programming on the output device that a portion of the program be played. Matthews discloses providing replays of programming (Col. 3,

Lines 39-43). In conjunction with the storage and subsequent playback of multiple channels of programming taught by Browne, this reads on the claimed replaying a portion of the program from a different perspective by sending a second perspective of the plurality of perspectives from the storage device to the display. Gopalakrishnan further discloses identifying in the first perspective a point in time corresponding to the beginning of a different portion of the program and automatically switching to a second portion of the programming at this point as stated above in Claim 1. This automatic switching to the second data stream at the identified point in time reads on the claimed automatically determining the point in time of the different perspective (determining when to switch to the second data stream) in response to the identification of the first point in time in the first perspective.

Regarding Claim 16, Matthews in view of Browne and further in view of Gopalakrishnan disclose a method as stated above in Claim 15. Browne teaches a method of storing multiple channels of programming and playing them back upon a user request as stated above. Thus, the first perspective may be a recorded perspective.

Regarding Claim 17, Matthews in view of Browne and further in view of Gopalakrishnan disclose a method as stated above in Claim 15. Browne further discloses sending a second perspective to one window in a display to play the portion of the program concurrently with sending the first perspective to a different window in the display as stated above in Claim 9.

Regarding Claims 18-19, see Claims 7-8 above, respectively.

Regarding Claim 20, Matthews in view of Browne and further in view of Gopalakrishnan discloses a system for recording a broadcast including a plurality of perspectives of a program as stated above in Claim 1. Browne further discloses a receiver operable to receive the broadcast (See Figure 1), a storage device coupled to the receiver (104c) and a processor (105) operable to present at least one of the plurality of perspectives to a viewer, record at least one of the perspectives in the storage device and present at least one of the recorded perspectives to the viewer as stated above.

Regarding Claim 21, see Claim 3 above.

Regarding Claim 22, Matthews in view of Browne and further in view of Gopalakrishnan disclose a system as stated above in Claim 20. Further disclosed is simultaneously presenting a recorded program and recording another program as stated above. This reads on the claimed system being configured to present a recorded perspective to the viewer without interrupting the recording of the broadcast.

Regarding Claim 23, Matthews in view of Browne and further in view of Gopalakrishnan disclose a system as stated above in Claim 20. Matthews further discloses that the receiver is a set top box (Col. 3, Line 1 and Figure 6).

Regarding Claim 24, Matthews in view of Browne and further in view of Gopalakrishnan disclose a system as stated above in Claim 22. Browne further discloses that the storage device is contained within the set top box (See Figure 1, 104c).

Regarding Claim 25, Matthews in view of Browne and further in view of Gopalakrishnan disclose a system as stated above in Claim 22. Browne further discloses

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that the storage device is removable coupled to the set top box (Page 11, Lines 4-9 and Figure 1, 104b).

Regarding Claim 26, Matthews in view of Browne and further in view of Gopalakrishnan disclose a system as stated above in Claim 20. Browne further discloses that the storage device is a magnetic disk (Page 11, Line 2).

Regarding Claim 27, Matthews in view of Browne and further in view of Gopalakrishnan disclose a system as stated above in Claim 20. Browne further discloses that the storage device is an optical disk (Page 11, Lines 1-2).

Regarding Claim 28, Matthews in view of Browne and further in view of Gopalakrishnan disclose a system as stated above in Claim 20. Browne further discloses that the storage device comprises RAM memory (Page 11, Line 2). What is not disclosed, however, is that the memory is flash memory. Official Notice is hereby taken that it is well known in the art to use flash memory to store data on. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Matthews in view of Browne and further in view of Gopalakrishnan with the flash memory of the well-known prior art in order to record information in a non-volatile RAM such that recorded programming is not lost during a power failure.

Regarding Claim 29, Matthews in view of Browne and further in view of Gopalakrishnan disclose a system as stated above in Claim 20. Browne further discloses receiving air/ground based broadcast sources as well as cable feeds. It is inherent that a tuner must be used in order to properly receiving programming on these mediums.

Regarding Claim 30, Matthews in view of Browne and further in view of Gopalakrishnan disclose a system as stated above in Claim 29. Browne further discloses a processor as stated above. What is not disclosed, however, is that the receiver comprise a demultiplexer. Official Notice is hereby taken that it is well known to use a demultiplexer when receiving audio/video data at an output device. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of Matthews in view of Browne and further in view of Gopalakrishnan with the demultiplexer of the well-known prior art in order to implement the receiving of video/audio information in a digital data-stream such as the well-known MPEG format.

Regarding Claim 31, see Claim 20 above. Browne further discloses playing back a stored program and viewing an incoming program source (Page 13, Lines 11-13) wherein the displayed programming may be presented on several monitor simultaneously (Page 13, Lines 29-33) or in multiple windows as stated above. This reads on the claimed processor being configured to present a first perspective to a viewer while presenting at least a second, stored perspective to the viewer.

Regarding Claim 32, see Claim 16 above.

Regarding Claim 33, see Claim 3 above.

Regarding Claim 34, see Claim 5 above.

Regarding Claim 35, Matthews in view of Browne and further in view of Gopalakrishnan disclose a system as stated above in Claim 31. Browne discloses a system operable to store and playback programming simultaneously. This reads on the

claimed system being configured to store the at least one perspective simultaneously with presenting the second perspective.

Regarding Claim 36, Matthews in view of Browne and further in view of Gopalakrishnan disclose a system as stated above in Claim 31. Browne further discloses a display coupled to the processor for presenting at least one perspective (Page 6, Line 27).

Regarding Claim 37, see Claim 9 above.

Regarding Claim 38, Matthews in view of Browne and further in view of Gopalakrishnan disclose a system as stated above in Claim 37. What is not disclosed, however, is that one of the first and second windows is nested inside the other of the first and second windows. Official Notice is taken that it was well known in the art at the time the invention was made to nest a window inside another window. Such a feature is known as picture-in-picture. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Matthews in view of Browne and further in view of Gopalakrishnan with the PIP of the well-known prior art in order to allow a user to view multiple programs at the same time with the more important/interesting programming occupying the majority of the viewing screen.

Regarding Claim 39-40, see Claim 7 above.

Regarding Claim 41-42, see Claim 8 above.

Regarding Claim 43, see Claim 10 above.

Regarding Claim 44, see Claim 14 above.

Regarding Claims 45-54, see Claims 1-10 above, respectively.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. U.S. Patent No. 6,144,375 to Jain et al. discloses a multi-perspective video recording and distribution system wherein the system is adapted to automatically switch views (tracking mode) to the best viewing perspective based on a user's pre-defined settings.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew R. Demicco whose telephone number is (571) 272-7293. The examiner can normally be reached on Mon-Fri, 9am - 5pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Grant can be reached on (571) 272-7294. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MRD

mrd

May 12, 2005



CHRIS GRANT
PRIMARY EXAMINER